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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,222	11/02/2001	Ron Bergman	7432.116USU1	2696
23552	7590	12/06/2004	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			BOTTORFF, CHRISTOPHER	
			ART UNIT	PAPER NUMBER

3618

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/007,222

Applicant(s)

BERGMAN, RON

Examiner

Christopher Bottorff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 17-21 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

The amendment filed March 29, 2004 has been entered. Claims 1-21 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitation "said outer edge" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 8-15, 19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamada et al. US 6,422,201.

Yamada et al. disclose an air intake system for a vehicle having an air intake at 28, an engine inlet at 18a in communication with the air intake at 28, and a screen layer 25, 25a, 26 interposed between the air intake at 28 and the engine air inlet at 18a. See Figure 3. An air flow path flows from the air intake at 28, through the screen layer 25, 25a, 26, and to the engine air inlet at 18a such that all air flowing through the air flow path must flow through the screen layer 25, 25a, 26 and all air passing through the screen layer 25, 25a, 26 must rise while passing through the screen layer 25, 25a, 26.

The system further comprises a hood 22 with a first portion 22b and a second portion 22a. See Figure 3. The second portion 22a is engaged to the first portion 22b and is vertically displaced above the first portion 22b. The first and second portions 22b, 22a cooperate to define the air intake at 28 by forming enclosed air chambers through which the air flows. An underlying part of the first portion 22b underlies the second portion 22a along the peripheral edges of portions 22a and 22b where the portions are in contact. The second portion 22a extends horizontally beyond the air intake at 28 and is removable from the first portion 22b. The second portion 22a comprises a lower surface with which the screen layer 25, 25a, 26 is engaged at the peripheral edges where portions 22a, 22b, and layer 25 are in contact, such that the screen layer 25, 25a, 26 and lower surface cooperate to define a cavity 24 therebetween that comprises at least a portion of the air flow path. The screen 25, 25a, 26 is removably engaged with the lower surface of the second portion. The screen layer 25, 25a, 26 comprises an outer edge that is in contact with the lower surface of the second portion and an edge mounting mechanism formed by the downwardly projecting

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portion extending along the periphery of layer 25 is engaged with the outer edge. The screen layer defines an aperture therethrough that forms a screen mount 25a and accommodates screen 26. See column 4, lines 45-47.

The separating arrangement allows debris from the air flowing through the screen layer 25, 25a, 26 to be pulled away from the separating layer by gravity. Also, an air plenum 21 defines at least a part of the air flow path and is in communication with the engine air inlet at 18a.

In regard to claim 21, the system of Yamada et al. operates according to a method in which air is drawn through the air intake at 28 into an air flow path, then the air is drawn from the air intake at 28 and through the screen layer 25, 25a, 26 such that all air flowing into the flow path must pass through the screen layer 25, 25a, 26 and all air rises while passing through the screen layer 25, 25a, 26, and then the air is drawn from the air flow path into an engine air inlet at 18a. See column 4, lines 48-63.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10, 13, 15, and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka US 5,174,258 in view of Thornburgh US 4,778,029.

Tanaka discloses an air intake system for a vehicle having an air intake at 77, an engine inlet at 84 in communication with the air intake at 77, and a separating layer formed by the portion of member 14 surrounding aperture 97 that is interposed between the air intake at 77 and the engine air inlet at 84. See Figures 4 and 6. The separating layer defines an aperture 97 therethrough. See Figures 5 and 6 and column 6, lines 44-48. An air flow path flows from the air intake at 77, through the separating layer, and to the engine air inlet at 84 such that all air flowing through the air flow path must flow through the separating layer and all air passing through the separating layer must rise while passing through the separating layer. See Figures 4 and 6.

The system further comprises a hood 14, 21 with a first portion 14 and a second portion 21. See Figures 4-6. The second portion 21 is engaged to the first portion 14 and is vertically displaced above the first portion 14. The first and second portions 14, 21 cooperate to define the air intake at 77 by forming enclosed air chambers through which the air flows. An underlying part of the first portion 14 underlies the second portion 21, and the underlying part is a separate piece from a remainder of the first portion 14 in that it accommodates aperture 97 separately from the remainder of portion 14. The air intake at 77 is configured such that it defines substantially zero are of projection on a plane above the hood as viewed from above the hood. See Figures 2 and 3. The second portion 21 extends horizontally beyond the air intake at 77 and is removable from the first portion 14. See Figure 4 and column 2, lines 67-68. The second portion 21 comprises a lower surface along the lower peripheral edges that rest upon portion 14 with which the separating layer is engaged such that the separating

layer and lower surface cooperate to define a cavity therebetween that comprises at least a portion of the air flow path. See Figure 4 and column 6, lines 44-48. Since the second portion 21 is removable from the first portion and the separating layer is associated with the first portion 14, the separating layer is removably engaged with the lower surface of the second portion.

The separating arrangement allows debris from the air flowing through the separating layer to be pulled away from the separating layer by gravity. An air plenum 85 defines at least a part of the air flow path and is in communication with the engine air inlet at 84. See Figure 6. The air intake at 77 is positioned such that a windshield 22 is between the air intake at 77 and an operator of the vehicle. See Figure 4. Also, A further air intake 99 is also provided. See column 6, line 65, through column 7, line 2.

In regard to claim 21, the system of Tanaka operates according to a method in which air is drawn through the air intake at 77 into an air flow path, then the air is drawn from the air intake at 77 and through the separating layer such that all air flowing into the flow path must pass through the separating layer and all air rises while passing through the separating layer, and then the air is drawn from the air flow path into an engine air inlet at 84. See Figures 4 and 6; column 5, line 65, through column 6, line 4; and column 6, lines 44-48.

Tanaka does not disclose that the separating layer includes a screen, thereby rendering the layer a "screen" layer. However, Thornburgh teaches the desirability of providing an engine air intake system with a screen 24 at an aperture provided at the separation of two regions of the air flow path. See Figure 1. From the teachings of

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Thornburgh, providing the separating layer of Tanaka with a screen at the aperture of the separating layer, and thereby rendering the layer a screen layer, would have been obvious to one of ordinary skill in the art at the time the invention was made. This would help reduce the amount of debris flowing to the engine.

In regard to claim 6, integrally forming the first and second portions represents a matter of obvious design choice that does not show insight that is contrary to the understandings and expectations of the prior art. Providing the first and second portions of Tanaka as an integrally formed piece would have been obvious to one of ordinary skill in the art at the time the invention was made in order to reduce the number of components requiring assembly.

Allowable Subject Matter

Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to Powell et al. and Martenas et al. have been considered but are moot in view of the new ground(s) of rejection. In view of the teachings of Yamada et al., Thornburgh, and Tanaka, the indication that claims 5, 9-12, 13, and 15 include patentable subject matter is hereby withdrawn.

Conclusion

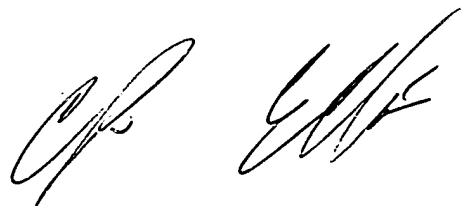
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Bottorff whose telephone number is (703) 308-2183. The examiner can normally be reached on Mon.-Fri. 7:30 a.m. - 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (703) 308-2560. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher Bottorff



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